US Army Corps of Engineers ®

Construction Bulletin

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CEMP-E

Subject: TSMCX Technical Support to Field During Airfield Pavement Construction

Applicability: INFORMATION

1. The Transportation Systems Center (TSMCX) is available to provide technical support to the field for all aspect of airfield pavement construction. The TSMCX is involved with the technical review of all Corps designed airfield projects (139ls and preliminary design through development of final plans, specifications and design analysis) per CEMP-ET Memorandum dated 12 June 1997, Subject: Military Construction Design Review Policy for Airfield, Railroad and Roadway Projects. They are familiar with the technical requirements and intentions of airfield designs and have a good overall understanding of airfield pavement projects.

2. The TSMCX is available to assist field offices to develop an on-site team experienced in airfield pavement construction. This would be accomplished as follows:

a. The field office could use TSMCX Indefinite Delivery Type (IDT) Contracts or Corps' TDY personnel to supplement in-house Corps' staff. The TSMCX has an IDT contract for Construction Management of Airfields and Roadways Worldwide, and two IDT contracts for Design and Evaluation of Airfields and Roadways Worldwide. These IDT contracts can be used to provide construction management services required for a project, provide full-time and/or part-time construction personnel, provide a full range of QA inspection services and laboratory testing services, and/or provide specialized technical consulting services, as required. The TSMCX could also provide you a list of other Corps of Engineers personnel who have experience in constructing airfield pavements.

b. The TSMCX is available to provide an on-site training seminar for the Corps' Quality Assurance (QA) staff and the contractor's construction staff on how to construct quality airfield pavements. Corps' designers and local Air Force Base Civil Engineer (BCE) and Army Director Public Works (DPW) staff may also be invited to attend. This is conducted in a class room atmosphere with slides and question/answer sessions. This can be incorporated into the

partnering meeting, and usually takes about 1 to 1 ½ days, depending on the scope of the construction project. The seminar reviews both good and bad paving practices and highlights items critical to good pavement performance. The seminar is tailored to specific project requirements. Seminars are usually conducted by Mr. Oswin Keifer (concrete slipform paving) and TSMCX Consultant Dr. Ray Brown (hot mix asphalt paving). Other items that can be included are subgrade/base/drainage layer, joint sealing, repair (spall repair, partial/full depth patches, slab replacement, etc), airfield lighting, marking and NAVAIDS, etc. The cost of the seminar is approximately $3800, plus travel and per diem. The cost will vary with the length of seminar and scope of project.

c. The TSMCX is available to provide technical consulting to construction field offices by answering questions via the phone, E-mail or fax at anytime during the project. Home phone numbers of selected TSMCX staff and TSMCX consultants will be available to provide technical support on weekends, when necessary.

3. The TSMCX is available to assist field offices with the review of construction submittals. The TSMCX staff is familiar with the submittal requirements and can answer questions on what is required to meet the specifications' intent. Most submittals will only require 1-3 hours, with PCC and ACC mix design submittals requiring about 8 hours. All submittal reviews would include written comments.

4. Once construction starts, the TSMCX is available to assist field office personnel in the start up of critical operations for airfield projects. The following are some critical operations where TSMCX on-site expertise would be beneficial to the projects quality:

a. Portland cement concrete pavement construction.

1) Prior to pavement placement the TSMCX is available to assist field offices in inspecting the concrete batch plant and aggregate sources to determine if the proposed batch plant and aggregate sources meet contact specifications.

2) A second visit would be arranged to coincide with the start up of concrete paving operations to assist your staff in solving any problems encountered with the contractor's mix design, equipment or procedures and to go over items that are critical to watch in the day to day operations.

3) It may be possible to do all of the above in one trip, depending on your needs and the location/setup of batch plant to be used.

b. Asphalt pavement construction. A similar site visit inspection process as what we proposed for the Portland Cement concrete pavement, except that the process would be completed in one site visit.

c. Miscellaneous. The TSMCX is available to make periodic site-visits to observe other items of critical nature to include: airfield lighting and ILS systems, pavement removal, embankment construction, sub-base/base course placement, joint sawing/sealing, grooving, pavement marking, etc.

d. Design Verification Inspections. Sometime during the midpoint of selected projects, the TSMCX will conduct a design verification inspection of the project. Inspection results will be used to verify the adequacy and accuracy of the existing airfield pavement design/construction criteria. They will also gather information from Corps field personnel and installation personnel regarding recommended changes or clarification to existing design/construction criteria for airfield pavements at no charge to the construction field office.

5. Estimated costs for the services mentioned above are to be based on $80/hour, plus travel and per diem. Exact cost of services will be negotiated between TSMCX and the Construction field office based on the scope of services required. If other consultants are used, cost would be per contract rates plus travel and Per diem. Costs include an outbrief of findings with Resident Engineer and other appropriate staff.

6. Point of Contact for TSMCX Services:

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Transportation Systems Center
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7. Points of Contact for Technical Consulting:

Airfield Pavements: Oswin Keifer, (503) 808-3835 (POD, SPD, NWD-NP areas)
B. J. Skar, (402) 221-7262 (All other areas)

Airfield Lighting/Marking/NAVAIDS: John Gregory. (402) 221-7267 (All areas)

TSMCX A-E Contracts: Dan Boyer, (402) 221-7266
John Gregory, (402) 221-7267

8. A description of Airfield Paving Seminars and list of seminars conducted is enclosed.

Encl

KISUK CHEUNG, P.E.
Chief, Engineering and Construction Division

Airfield Paving Seminars

Transportation Systems Center provides training upon request

Airfield Paving Seminars (usually 1 day):

-Review of good and bad paving practices
- Identify items critical to good pavement performance
- Provided for Corps QA and Contractor QC personnel
- Can be included with a partnering meeting,
- Usually concentrate on slip form paving
- Also discuss asphalt paving, base course, drainage layer, etc

Seminars have been provided for:

Louisville District - Wright-Patterson AFB, OH
Alaska District - Eielson AFB, AK
Omaha District - Offutt AFB, NE
Los Angeles District - Ft Huachuca, AZ
Ft Bliss DPW - Ft Bliss, TX
Los Angeles District - Plant 42, Palmdale, CA
New York District - Ft Drum, NY
Philadelphia District - Dover AFB, DE

Cost of seminar is approx. $3800, plus travel and per diem

Seminars are usually conducted by Oswin Keifer (concrete slipform paving) and TSMCX Consultant Ray Brown (hot mix asphalt paving)